



Amendments to the Claims

1-21. (Canceled)

22. (Withdrawn) A process for rendering a medical device bio-compatible comprising:

- a) providing a substrate with a coating comprising an aqueous emulsion or dispersion of a polycarbonate-polyurethane composition having at least one internal emulsifying agent; and
- b) drying said coating onto said substrate to attach said coating to said substrate.

23. (Withdrawn) The process of claim 22, wherein said at least one internal emulsifier is at least one organic acid functional group.

24. (Withdrawn) The process of claim 23, wherein said coating further comprises an excess of a polyfunctional cross-linking agent which is reactive with said at least one organic acid functional group on said polycarbonate-polyurethane composition.

25. (Withdrawn) The process of claim 24, further comprising the steps of

- a. contacting said substrate having said dried coating thereon with a bio-active agent, and
- b. forming a continuous bio-active coating on a surface of said substrate by drying said bio-active agent to covalently bond said bio-active to said coating via said excess polyfunctional cross-linking agent.

26. (Currently amended) A coating composition for enhancing the bio-activity of a surface of a medical device, said coating composition formed from an aqueous emulsion or dispersion comprising a polycarbonate-polyurethane composition containing an organic acid functional group and an excess of a polyfunctional cross-linking agent, ~~said composition forming a coating on a surface of said medical device and being bonded thereto and reactive with bio-active agents~~ said excess being reactive with bio-active agents.

27-33. (Canceled)

34. (Currently amended) ~~A coating formed from the composition~~ The coating composition of claim 26, wherein said coating composition is bonded to said surface ~~and forms said coating thereon.~~

35. (Canceled)

36. (Currently amended) The coating composition of claim 26, wherein said polyfunctional cross-linking agent is selected from the group consisting of polyfunctional aziridines, polyfunctional carbodiimides and combinations thereof.

37. (Currently amended) The coating composition of claim 26, wherein said bio-active agents are selected from the group consisting of thrombo-resistant agents, antibiotic agents, anti-tumor agents, growth hormones, antiviral agents, anti-angiogenic agents, angiogenic agents, anti-mitotic agents, anti-inflammatory agents, cell cycle regulating agents, genetic agents, hormones, chemically modified equivalents and combinations thereof.

38. (Currently amended) The coating composition of claim 26, wherein said surface is selected from the group consisting of polymers, ceramics, metals, glasses and combinations thereof.

39. (Currently amended) The coating composition of claim 26, wherein said surface is selected from the group consisting of polyethylene, polypropylene, polyvinyl chloride, polytetrafluoroethylene, polyvinyl acetate, polystyrene, poly(ethylene terephthalate), polyurethane, polyurea, silicone rubbers, polyamides, polycarbonates, polyaldehydes, natural rubbers, polyether-ester copolymers, styrene-butadiene copolymers and combinations thereof.

40. (Withdrawn) A process for providing a bio-compatible coating to at least a portion of a surface of a medical device comprising:

providing an aqueous emulsion or dispersion of a polycarbonate-polyurethane composition having at least one emulsifying agent with one or more organic acid functional groups;

providing a polyfunctional cross-linking agent which is covalently reactive with said one or more organic acid functional groups, wherein said polyfunctional cross-linking agent is

selected from the group consisting of polyfunctional aziridines, polyfunctional carbodiimides and combinations thereof;

combining said polycarbonate-polyurethane composition and said polyfunctional cross-linking agent to form a first coating composition;

applying said first coating composition to said portion of said surface;

drying said first coating composition to attach said first coating composition to said portion of said surface wherein the dried composition contains an excess of polyfunctional cross-linking agent which is not covalently bonded to said one or more organic acid functional groups of said first coating composition;

applying a second coating composition which comprises a bio-active agent having one or more organic acid functional groups which are covalently reactive with said excess polyfunctional cross-linking agent onto the dried first coating composition; and

drying said second coating composition to covalently bond said bio-active agent to said first coating composition via said excess polyfunctional crosslinking agent.